

Amendments to the Claims

This listing of claims will replace the prior version in the application.

CLAIMS

1. (currently amended) A process for the preparation of thermoset materials and objects ~~according to the following stages comprising:~~
 - a- ~~Preparation of preparing~~ a formulation (A) comprising, by weight, from 10 to 99% of at least one epoxide prepolymer and from 1 to 90% of at least one first rheology-regulating agent (I),
 - b- ~~Preparation of preparing~~ a formulation (B) comprising, by weight, from 1 to 90% of at least one hardener and from 10 to 99% of at least one second rheology-regulating agent (~~I~~ II),
 - c- ~~Preparation of preparing a semifinished product by mixing formulation A and formulation B products by simultaneous treatment of the formulations (A) and (B) according to the nature of the materials and objects to be prepared, if need be observing the stoichiometry between the epoxide prepolymer and the hardener and, if appropriate, including the fibers, mats, woven fabrics or any other material commonly used in composite materials,~~
 - d- ~~Production of the preparing a desired structures structure~~ with the semifinished product obtained in c according to standard techniques for processing semifinished products for thermoset composites, such as molding, including drape molding, or the production of sandwich systems, and thereafter,
 - e- ~~Reaction of the formulation in order~~ reacting formulation A and formulation B in the desired structure to obtain a composite material according to the standard techniques for processing thermoset composite materials, such as heat forming,

~~A and B not necessarily comprising the same rheology-regulating agent.~~
2. (currently amended) The process as claimed in claim 1, characterized in that the first rheology-regulating agent and second rheology-regulating agent ~~is~~are individually at

least one block copolymer chosen from S-B-M, B-M and or M-B-M block copolymers in which:

[[>]] each block is connected to the other by means of a covalent bond or of one or more intermediate molecules connected to one of the blocks via a covalent bond and to the other block via another covalent bond,

[[>]] M is a polymer miscible with the epoxide prepolymer, ~~for example a methyl methacrylate homopolymer or a copolymer comprising at least 20% by weight of methyl methacrylate,~~

[[>]] B is incompatible with the epoxide prepolymer and with the M block,

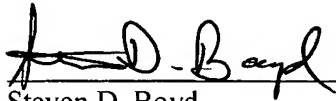
[[>]] S is incompatible with the thermosetting resin and with the B block.

3. (currently amended) The process as claimed in claim 2, characterized in that the M block is chosen from poly(methyl methacrylate)s ~~and~~ homopolymers or copolymers comprising at least 20% by weight of methyl methacrylate.
4. (currently amended) The process as claimed in claim 3, characterized in that the M blocks of the block copolymers are composed of at least 75% syndiotactic PMMA ~~to at least 75%.~~
5. (currently amended) The process as claimed in ~~one of claims 2 to 4~~ claim 2, characterized in that the M blocks of the block copolymers additionally comprise reactive monomers, ~~such as glycidyl methacrylate, tert-butyl methacrylate or acrylic acid.~~
6. (currently amended) The process as claimed in ~~one of claims 2 to 5~~ claim 2, characterized in that the Tg of the B blocks is less than 0°C ~~and preferably less than -40°C.~~
7. (currently amended) The process as claimed in claim 2, characterized in that the B block is chosen from poly(alkyl acrylate)s, ~~such as poly(butyl acrylate), poly(ethylhexyl acrylate) or poly(octyl acrylate), and or~~ polydienes.
8. (previously presented) The process as claimed in claim 7, characterized in that the B block is a 1,4-polybutadiene.
9. (currently amended) The process as claimed in claim 7 ~~or 8~~, characterized in that the dienes of the B block are hydrogenated.
10. (currently amended) The process as claimed in claim 2, characterized in that the Tg or the M.p. of S is greater than 23°C ~~and preferably greater than 50°C.~~
11. (previously presented) The process as claimed in claim 10, characterized in that S is

polystyrene.

12. (currently amended) The process as claimed in ~~one of claims 2 to 11~~ claim 2, characterized in that the weight-average molar mass of the block copolymers ~~can be~~ is between 10 000 g/mol and 500 000 g/mol.
13. (currently amended) The process as claimed in claim 12, characterized in that the weight-average molar mass of the block copolymers ~~can be~~ is between 20 000 g/mol and 200 000 g/mol.
14. (currently amended) The process as claimed in claim 1, characterized in that said ~~simultaneous treatment is a~~ preparation of a semifinished product is via coweaving.
15. (currently amended) A woven or knitted fabric ~~and a knitted fabric~~ prepared according to the process of claim 14.
16. (currently amended) The process as claimed in claim 1, characterized in that said ~~simultaneous treatment is a~~ preparation of a semifinished product is via coextrusion.
17. (currently amended) The process as claimed in claim 1, characterized in that said ~~treatment is an~~ preparation of a semifinished product is via impregnation by a mixture of powders.
18. (currently amended) A thermoset object ~~and a thermoset material~~ prepared according to the process of claim 16 ~~or 17~~.
19. (new) The process of claim 1, characterized in that said semifinished product further comprises fibers, mats, woven fabric or combinations thereof.
20. (new) The process of claim 1, characterized in that said reacting comprises heating, applying pressure or a combination thereof.
21. (new) The process of claim 1, characterized in that said first rheology-regulating agent (I) and said at least one second rheology-regulating agent (II) are the same or different.
22. (new) The process of claim 5, characterized in that said reactive monomer is selected from glycidyl methacrylate, tert-butyl methacrylate or acrylic acid.
23. (new) The process of claim 6, characterized in that the T_g of the B blocks is less than -40° C.
24. (new) The process of claim 7, characterized in that said poly(alkyl acrylate) is selected from poly(butyl acrylate), poly(ethylhexyl acrylate) or poly(octyl acrylate).
25. (new) The process of claim 10, characterized in that the T_g of S is greater than 50° C.
26. (new) A thermoset object prepared according to the process of claim 17.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "S.D. Boyd", is written over a horizontal line.

Steven D. Boyd
Attorney for the Applicants
Reg. No. 31,000
Tel (215) 419-5270
Customer No.: 31684

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